WHAT IS CLAIMED IS:

A braided tubular structure comprising a plurality of component 1. 1 tubular members each having longitudinal lumens, woven radially in and out to form said 2 substantially tubular braided structure. 3 2. The braided tubular structure of claim 37 wherein the component 1 2 tubular members are comprised of polymeric tubing. 1 3. The braided tubular structure of claim 37 wherein the component 2 tubular members are comprised of metallic tubing. 4. The braided tubular structure of claim 39 where the metallic tubing 1 2 comprises a superelastic alloy. The braided tubular structure of claim 40 wherein the superelastic alloy 1 5. 2 comprises nickel and titanium. 6. The braided tubular structure of claim 37 further comprising at least 1 one polymeric tubular member exterior to said substantially tubular braided structure. 2 The braided tubular structure of claim 42 wherein said braided tubular 7. 1 structure is of a size and shape suitable for introduction into a human blood vessel. 2 The braided tubular structure of claim 37 where said plurality of 1 8. component tubular members longitudinal lumens are fluidly connected to a plenum at least 2 3 one of the distal and proximal ends.